



FAQ Insects and insect products in feed

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GMP+

Assurance



GMP+ Feed Certification scheme

INDEX

1	INT	RODUCTION	3
2	EUI	ROPEAN LEGISLATION	4
	2.1	CAN INSECTS BE USED IN FEED?	4
	2.2 USE IN	WHY IS THE LEGISLATION ON INSECTS STRICTER FOR USE IN FEED THAN FOR HUMAN FOOD?	4
	2.3	WHERE CAN I FIND THE APPLICABLE LEGISLATION?	4
3	USI	E OF INSECTS IN GMP+ FEED	5
	3.1	ARE INSECTS FOOD PRODUCING ANIMALS?	5
	3.2 FEED?	What is the position of GMP+ International on the use of insects in $\ensuremath{5}$	
	3.3	WHAT INSECT PRODUCTS ARE PERMITTED IN FEED BY GMP+ INTERNATIONAL?	>
4	CE	RTIFICATION	5
	4.1	WHAT DOES THE PRODUCTION CHAIN LOOK LIKE?	6
	4.2	How can the GMP+ activities be certified?	7
5	ОТІ	HER	3
	5.1 Produ	WHAT TO DO IF MY PRODUCT WITH INSECTS IS NOT YET INCLUDED IN THE FSP JCTLIST	
	5.2	How will any changes in legislation or the FSP Product list be communicated?	8
	5.3 INSEC	DO THE SAME REQUIREMENTS APPLY FOR PRODUCTION OF INSECTS AND PRODUCTS FOR HUMAN CONSUMPTION?	8

1 Introduction

This D-document (GMP+ D3.20) was drawn up following the increasing use of insects in feed. Since the use of insects in feed is applied to an increasing extent, this also invokes more questions. This document answers these questions, but also provides information about the position of GMP+ International regarding the use of insects in feed and what requirements apply thereto.

This FAQ list is based on the questions asked by companies. If you have any questions that are not answered in this list, please contact GMP+ International via the contact form or via info@gmpplus.org.

2 European legislation

2.1 Can insects be used in feed?

The table below contains an overview of the currently possible application of insects in accordance with the EU legislation (October 2017).

Target animal → Insect products ↓	Pets	Ruminant farm animals	Other farm animals, except for aqua culture animals	Aqua culture animals
(Processed) animal proteins of insects *	Yes	No	No	Yes
Oil/fat of insects *	Yes	Yes	Yes	Yes
Insects alive *	Yes	No	Yes	Yes

^{*} These ingredients for the feed substrates for growing insects must meet the feed legislation (such as Regulation 999/2001, Reg. 142/2011, Reg. 1069/2009, Reg. 767/2009, Reg. 183/2005, Reg. 1831/2003, Reg. 396/2005). Based on an HACCP analysis, the safety of an ingredient must be verified. Please note: breeding insects on household waste, slaughter waste and fertilizer is forbidden.

2.2 Why is the legislation on insects stricter for use in feed than for use in human food?

Insects are used more and more in human food and the use of insects in feed is increasing as well. However, the legislation on the use of insects in feed is not the same as for human food. The reason for that, is the issue concerning the use of animal protein in feed and the possible illnesses they cause in farm animals.

2.3 Where can I find the applicable legislation?

On the website of EUR Lex you can find the European legislation in various languages. The website is available via the URL: http://eur-lex.eu/. On the website of IPIFF, you can find information about Law and legislation about insects. The website is available via the URL: http://www.ipiff.org/our-position.

3 Use of insects in GMP+ feed

3.1 Are insects food producing animals?

The GMP+ Feed Certification scheme was originally intended for 'traditional' farm animals and not for insects. GMP+ does allow that 'insects' are part of the scheme, just like pets. Partly due to the increasing use of insects and insect products in feed, insects are accepted as 'food producing animal'.

3.2 What is the position of GMP+ International on the use of insects in feed?

GMP+ International supports the use of insects and insect products in feed, provided that the safety is assured. That is why the Law and regulations are always adhered to and why feed materials, including feed materials originating from insects, can only be used if all risks are assured in the Feed Safety Management System (FSMS) and that all GMP+ requirements must be met. Of course, a Risk Assessment must have been drawn up and the product must have been included in the FSP Product list.

3.3 What insect products are permitted in feed by GMP+ International?

The FSP Product list contains all feed materials accepted by GMP+ International. These products are only included if they meet the European laws and regulations. Currently (November 2017) three insect products are included.

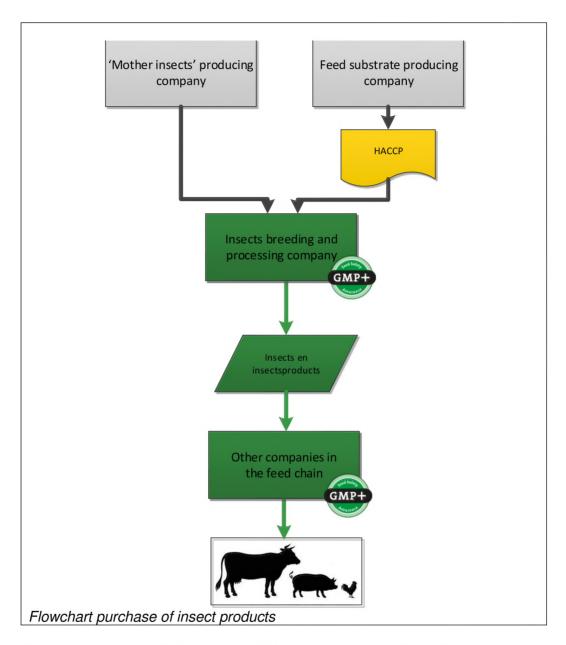
Code	Product	Definition	Synonym	Risk assessment
9.071	Insect protein meal	Product that consists of processed animal proteins from insects. Product obtained by grinding, heating and drying of larvae of the black soldier fly (Hermetia illucens) from which the oil has been partial physically removed.	Catalog: 68/2013: 9.4.1	Insect processing (2, 336, 17-NOV-17)
9.072	Insect larvae (live)	Live larvae from the black soldier fly (Hermetia ilucens).	FMR no. : 06357-EN	Insect processing (2, 336, 17-NOV-17)
9.070	Insect oil	Product that consists of oil from in- sects (derived from larvae from the black soldier fly (Hermetia illucens).	Catalog: 68/2013: 9.2.1	Insect processing (2, 336, 17-NOV-17)

The products on the FSP Product list are permitted in feed for food producing animals (**unless specified otherwise**). For information about restrictions, please see question 2.1.

The FSP Product list can be extended based on an approved Risk Assessment. Stakeholders can submit Risk Assessments for approval to GMP+ International.

4 Certification

4.1 What does the production chain look like?



The above is a simplified diagram of the production chain of insects and insect products with the destination feed.

The requirements are as follows:

- No requirements are defined for the company that produces the 'mother insect'; this falls outside of the scope of the GMP+ FC scheme.
- The 'feed substrate' producing company falls outside of the GMP+ chain.
 Based on an HACCP analysis, it must be determined whether the feed substrates are safe and whether the risks have been mapped.
- The company 'producing' and 'processing' the insects must be GMP+ certified because the feed is created in this phase.

'Insects and insect products fall under GMP+ requirements since this concerns a feed material. These products can be sold to a subsequent link in the feed chain as GMP+ assured feed. These products must be included in the FSP product list (please see question 3.3)

4.2 How can the GMP+ activities be certified?

There are various options regarding certification of the insects and insect products (see question 4.1):

<u>For farm animals</u>: certification under requirements from GMP+ B1 or B2, scope 'production of feed materials'.

<u>For pets:</u> certification under requirements from GMP+ B1, B2 of B8, scope 'production of feed'.

Of course, it is important to verify at all times what parts of insects can be used in what target feed according to the European legislation and the FSP Product list of GMP+ International.

5 Other

5.1 What to do if my product with insects is not yet included in the FSP Product list?

New products can be added based on an approved Risk Assessment. The Risk Assessment can be submitted to GMP+ International, which will consider it for approval. More information is available on our website.

5.2 How will any changes in legislation or the FSP Product list be communicated?

Changes in legislation are not always communicated by GMP+ International. The changes can take place so often that a news item can 't always be published about it. It is the responsibility of the GMP+ participant to make sure that it is aware about the applicable legislation.

Changes in the FSP Product list are communicated by means of the GMP+ newsletters on the GMP+ website. You can <u>sign up</u> for the collective newsletters on the start screen of the GMP+ website.

5.3 Do the same requirements apply for production of insects and insect products for human consumption?

This FAQ list only addresses the requirements that apply to the production of insects and insect products intended to be fed to animals. This means that the insects are used as feed. The requirements for the production of insects and insect products for human consumption are not discussed here, because this falls outside of the GMP+ chain. The reason for this is that these insects (similar to dairy cows) are food producing animals for which different requirements apply.



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